

HUMAN IMMUNODEFICIENCY VIRUS AND ACQUIRED IMMUNE DEFICIENCY SYNDROME: KNOWLEDGE, ATTITUDE, AND PREVENTIVE PRACTICES AMONG HEALTH CARE PROVIDERS IN A SELECTED CITY, PHILIPPINES

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Abstract

Human Immunodeficiency Virus (HIV), a virus that targets CD4 cells (T-helper cells) can progressively weaken the immune system and leads to Acquired Immune Deficiency Syndrome (AIDS). Despite enacting the Philippine AIDS Prevention and Control Act in 1998, the Philippines still faces challenges in giving sufficient attention to HIV/AIDS cases due to other urgent socioeconomic concerns. This study focuses on the current knowledge, attitude, and preventive practices (KAPP) of healthcare workers regarding HIV and AIDS. It aims to develop a primary healthcare model that is suitable for the needs of the community residing in the National Capital Region (NCR). To gain a better understanding of the issue, nurses and midwives from three local government units were surveyed. The findings indicate that healthcare providers treat HIV-positive patients fairly and without prejudice. Nurses and midwives possess adequate knowledge and positive attitude toward HIV/AIDS and are aware of preventive practices. But there is still a need for improvement and reinforcement in their knowledge of HIV/AIDS transmission. Wherein this suggests that, in order to improve the delivery of HIV/AIDS care services locally,

healthcare personnel need to have improved education and information.

Keywords: Healthcare, HIV/AIDS, KAPP; Philippines

INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is a serious medical condition caused by the human immunodeficiency virus. It is characterized by a set of advanced symptoms that can weaken the immune system, leading to vulnerability to secondary infections and opportunistic diseases (Waymack & Sundareshan, 2023).

The retrovirus was officially named Human Immunodeficiency Virus (Sharp & Hahn, 2011) in 1986. CD4 (T Cells) are targeted by HIV, which can ultimately lead to the development of Acquired Immunodeficiency Syndrome (AIDS), damaging the immune system. Initially, AIDS resulted in a life expectancy of 1-2 years when it was first discovered in 1981 (Sharp & Hahn, 2011). It became an epidemic in 2000, and presently, about 36.1 million people are living with HIV worldwide. Every day, approximately 15,000 new patients are diagnosed, with 95% of cases being reported in poor countries (World Health Organization, 2023). HIV continues to claim lives across the globe, with one million people dying from HIV-related causes in 2016 alone. During that same year, 1.8 million people were newly infected. Although HIV cannot be cured completely, antiretroviral drugs have been developed through continued studies and research that can help control the virus and allow those infected to lead productive and meaningful lives. The World Health Organization has reported that 54% of adults and 43% of children infected with HIV receive lifelong antiretroviral therapy.

To prevent the spread of HIV, the Philippine government has enacted Republic Act 8504, entitled The Philippine AIDS Prevention and Control Act of 1998, which aims to educate people, particularly those aged 15-24, through campaigns and integration in school curricula and the workplace. The law also mandates that HIV patients are also provided with basic healthcare and livelihood services, and a national council has been created to oversee the country's overall HIV/AIDS problem. Furthermore, the law also authorizes the creation of AIDSWATCH, a monitoring system for HIV/AIDS cases in hospitals, clinics, and testing centers that evaluates government prevention measures and reports findings to the Department of Health while ensuring client confidentiality (Lawphil, n.d). Civil service organizations and international organizations play a crucial role in supplementing the government's efforts in preventing HIV, providing relevant statistics and financial and material assistance, and advocating against the stigma and discrimination related to HIV among Filipinos.

Healthcare can be classified into two main categories: facility-based and community-based. Facility-based healthcare is provided by highly skilled medical professionals who collaborate to offer specialized care. In contrast, community-based healthcare is provided by general practitioners, public health nurses, midwives, and community volunteers such as barangay health workers, nutritionists, barangay officials, and non-medical non-governmental organizations. This approach prioritizes a holistic approach to healthcare that emphasizes ongoing psychosocial support for individuals living with human immunodeficiency virus and

their families (OECD/World Health Organization/Eurostat, 2011).

In 1998, healthcare services were devolved to local government units in the Philippines. However, community participation in evaluating success is rare due to budget constraints. The responsibility of finding solutions to local problems falls under local government units, along with accountability and transparency. Financing for health programs comes from the national government's Internal Revenue Allotment (Ronquillo, 2017).

Primary healthcare has two different definitions depending on the structure of the healthcare system. In a system with a gatekeeper, initial consultations with healthcare professionals like doctors, nurses, and midwives are considered primary care, as opposed to secondary care, which is provided by specialists. In a system without a gatekeeper, primary care is typically provided by polyclinics, and hospitals offer secondary care. Primary healthcare in the Philippines is provided through local health centers, rural health units, and community health workers. Its main objective is to include the neighborhood in disease prevention. It is the first stage in a continuing healthcare procedure and acts as the first point of contact (Alldis, 2009).

Primary healthcare workers, including physicians, nurses, midwives, and other professionals, work together with community members to provide care. They play a crucial role in preventing and managing blood-borne infections such as HIV but must also take steps to prevent exposure to patient fluids in the workplace (Biljana, 2008). Healthcare providers face challenges in preventing HIV transmission. Primary care workers play a vital role in targeted testing and managing chronic conditions (Romanelli & Matheny, 2009). Education is key to patient care, along with a multidisciplinary approach involving nurses, pharmacists, nutritionists, social workers, and case managers.

Establishing a primary healthcare model to combat the spread of HIV/AIDS is crucial. It should be treated as a national security threat, as Thailand and Cuba (Ishikawa et al., 2016) have done. As part of this, the HIV/AIDS statute must be repealed, testing must be made mandatory, stigma and prejudice must end, treatment must be free, and those who need it must receive quality aftercare. To prevent the disease from spreading at the family and community levels, we must devolve healthcare to the local government. They can then control disease spread by caring for their constituents and providing exceptional primary healthcare. The disease can be contained before it unintentionally spreads by advocacy, required testing, counseling, and collaborations with non-government organizations and treatment facilities at the local government level. Therefore, it is considered important and appropriate to carry out this investigation.

METHODOLOGY

The study utilizes survey questionnaires from healthcare workers. Wherein the primary data came directly from nurses and midwives of three local government units in the National Capital Region (NCR): Pasay, Taguig, and San Juan City. The questions were focused on the health workers' knowledge and attitude towards HIV/AIDS, as well as their opinions about affected patients. The one-on-one interview also covered the medical professionals' knowledge of available prevention methods and how they learned about them. On the other hand, the

secondary data were obtained from Fact Sheets produced by organizations like the World Health Organization, UN AIDS, and UNICEF. Literature regarding HIV/AIDS prevention in the Philippines was also reviewed to gather further necessary data.

A Likert scale, one of the most fundamental and widely used psychometric tools in research in the social and behavioral sciences (Joshi et al., 2015), was used to gather data regarding the health worker's attitudes toward HIV/AIDS and those affected by it. The scale was used to determine whether or not they agreed with given attitude indicators. These data were then analyzed with several statistical treatments, namely (1) Weighted Mean, (2) Measure of Central Tendency, (3) Linear Regression, and (4) ANOVA Test.

RESULTS AND DISCUSSION

Demographic Profile of Health Care Providers

A total of 75 respondents were included in the study. Table 1 shows the distribution of the demographic profiles of respondents. Their age ranged from 21 to 64 years, with a mean age of 39.07. Of the total number of respondents surveyed, 67 (89.3%) were women, while only 8 (10.7%) were men. With the average age in years of these medical workers being 39 years old, the majority (54.7%) of them are married and followed closely by those who are single (40%). All respondents were college undergraduates, graduates, and postgraduates. This comes as no surprise as the nature of the medical profession is one that requires a college degree. More than half (65%) of the respondents were midwives. Nurses, on the other hand, comprised almost 35% of the respondents. The respondents that were surveyed were from three major cities in Metro Manila, namely, Taguig (52%), Pasay (36%), and San Juan (12%). Respondents were working in their position for an average of 11.01 years (range: 2 months to 38 years).

Table 1: Demographic Profile of Respondents

	Frequency (n=75)	Percentage
Age (in years)		
21 – 30	24	32.4
31 – 40	17	23.0
41 – 50	22	29.7
51 – 60	3	4.1
61 – 70	8	10.8
Mean ± SD = 39.07 ± 11.90		
Gender		
Male	8	10.7
Female	67	89.3
Civil Status		
Single	30	40.0
Married	41	54.7
Separated	3	4.0
Widowed	1	1.3
Position		
Midwife	49	65.3
Nurse	26	34.7

Place of Origin		
Pasay	27	36.0
San Juan	9	12.0
Taguig	39	52.0
Educational Attainment		
College Undergraduate	4	5.3
College Graduate	69	92.0
Postgraduate	2	2.7
Number of years in service		
<1	2	2.8
1 – 5	30	42.3
6 – 10	10	14.1
11 – 15	9	12.7
16 – 20	9	12.7
21 – 25	5	7.0
26 – 30	2	2.8
>30	4	5.6
Not Indicated (4)		
Mean ± SD = 11.01 ± 10.04		

Knowledge, Attitude and Practices on HIV/AIDS of Health Care Providers

Knowledge

In this study, knowledge refers to how much the respondents know about HIV/AIDS and its prevention measures. Table 2 shows the distribution of healthcare providers based on their understanding of HIV/AIDS, including its virology, symptoms, and mode of transmission. Of all respondents, 86.3% agreed that HIV is the virus that causes AIDS, while only 5.5% disagreed. In addition, 34.7% believe that individuals with HIV can develop antibodies within six months, and 16.7% agree that HIV is challenging to eliminate, even outside the body. In terms of transmission, 57.5% agreed that only blood and semen can spread the virus.

Table 2: Distribution of Health Care Providers According to Knowledge with Regards to HIV/AIDS

Knowledge with Regards to HIV/AIDS	Completely Agree (1)	Somewhat Agree (2)	Somewhat Disagree (3)	Completely Disagree (4)	I Don't know (5)	Total
Virology						
1. HIV is the virus that causes AIDS	63 (86.3%)	6 (8.2%)	1 (1.4%)	3 (4.1%)	0	73
2. Persons infected with HIV will likely develop antibodies within 6 mos.	25 (34.7%)	19 (26.4%)	6 (8.3%)	14 (19.4%)	8 (11.1%)	72
3. Even outside the body, the HIV virus is hard to kill	12 (16.7%)	15 (20.8%)	10 (13.9%)	28 (38.9%)	7 (9.7%)	72
Presenting symptoms						
1. A patient is known to have HIV if s/he has tested positive for HIV	60 (82.2%)	11 (15.1%)	1 (1.4%)	1 (1.4%)	0	73

2. One cannot know by looking if someone is HIV-positive	56 (76.7%)	9 (12.3%)	2 (2.7%)	6 (8.2%)	0	73
Mode of transmission						
1. Blood and semen are the only bodily fluids that transmit HIV	42 (57.5%)	6 (8.2%)	6 (8.2%)	19 (26.0%)	0	73

Attitude

In this study, an attitude refers to the opinion or general feeling of a respondent towards HIV/AIDS, people living with HIV/AIDS, and the prevention of the spread of the disease. Table 3 shows the distribution of healthcare providers according to their attitude toward people living with HIV/AIDS. 40% strongly agree that HIV Positive woman has the right to become pregnant. 76% strongly agree that an HIV-positive teacher should be allowed to teach. 38.7% strongly agree that most people living with HIV were infected because of irresponsible behavior, while 60.8% strongly agree that they would be willing to care for a family member who had AIDS in their home. More than 40% strongly agree that they would feel comfortable sharing a bathroom with a person they knew had HIV/AIDS, and if they found out that a food or vegetable vendor was HIV positive, they would feel comfortable buying from her. Only less than 5% strongly agreed that their partner would leave them if they were infected with HIV and that AIDS is God’s punishment for immorality.

Table 3: Distribution of Health Care Providers According to their Attitude on People Living with HIV/AIDS

Attitude on People Living with HIV/AIDS	Strongly Agree (1)	Somewhat Agree (2)	Somewhat Disagree (3)	Completely Disagree (4)	I Don't know (5)	Total
1. An HIV Positive woman has the right to become pregnant	30 (40.0%)	21 (28.0%)	13 (17.3%)	11 (14.7%)	0	75
2. An HIV positive teacher should be allowed to teach	57 (76.0%)	14 (18.7%)	4 (5.3%)	0	0	75
3. Most people living with HIV were infected because of irresponsible behavior	29 (38.7%)	24 (32.0%)	10 (13.3%)	12 (16.0%)	0	75
4. I would be willing to care for a family member who had AIDS in my home	45 (60.8%)	20 (27.0%)	5 (6.8%)	3 (4.1%)	1 (1.4%)	74
5. If I were infected with HIV and told my partner, he/she would leave me	3 (4.1%)	10 (13.5%)	24 (32.4%)	16 (21.6%)	21 (28.4%)	74
6. I would feel comfortable sharing a bathroom with a person I knew had HIV/AIDS	33 (44.0%)	24 (32.0%)	9 (12.05)	7 (9.3%)	2 (2.7%)	75

7. If I found out that a food or vegetable vendor was HIV positive, I would feel comfortable buying from her	32 (43.2%)	25 (33.8%)	10 (13.5%)	5 (6.8%)	2 (2.7%)	74
8. AIDS is God's punishment for immorality	2 (2.7%)	5 (6.7%)	10 (13.3%)	51 (68.0%)	7 (9.3%)	75

Prevention Practices

In this study, prevention practices are the methods used by respondents to avoid getting HIV/AIDS. Table 4 displays the distribution of healthcare providers based on their knowledge of HIV/AIDS prevention measures. All respondents (100%) agreed that using a condom during sex always prevents HIV/AIDS. Over 90% of the respondents believed that abstaining from sexual intercourse and using a new needle for each injection also prevents HIV/AIDS. Almost half (47.9%) of the respondents stated that maintaining a healthy diet can prevent HIV/AIDS.

Table 4: Distribution of Health Care Providers According to Knowledge with Regards to HIV/AIDS Prevention Measures

Knowledge with Regards to HIV/AIDS Prevention Measures	True	False	I am not sure	Total
Abstain from sexual intercourse	68 (91.9%)	6 (8.1%)	0	74
Maintains a healthy diet	35 (47.9%)	36 (49.3%)	2 (2.7%)	73
Uses a new, unused needle for each injection	71 (94.7%)	4 (5.3%)	0	75
Always uses a condom during sex	75 (100%)	0	0	75

Relationship between Knowledge, Attitudes and Preventive Practice of Respondents

In Tables 5, 6, and 7, there is a clear link between knowledge and attitudes towards HIV/AIDS and between knowledge and preventive measures. When people have a positive attitude towards the issue, it corresponds to having better knowledge, leading to improved preventive practices. Tables 5, 6, and 7 show that people who better understand HIV/AIDS are more likely to have positive attitudes toward the issue and take preventative measures. Those with a higher level of knowledge about the topic are more committed to preventing the spread of the disease. This indicates that education is essential in promoting positive attitudes and behaviors toward HIV/AIDS. It emphasizes the need for educational campaigns and interventions to increase awareness and understanding of this critical public health issue.

Table 5: P Values for the Relationship between Knowledge and Attitude

Knowledge with Regards to HIV/AIDS	Att1	Att2	Att3	Att4	Att5	Att6	Att7	Att8
Virology								
1. HIV is the virus that causes AIDS	0.81 (NS)	0.22 (NS)	0.06 (NS)	0.69 (NS)	0.84 (NS)	0.62 (NS)	0.85 (NS)	0.29 (NS)
2. Persons infected with HIV will likely develop antibodies within 6 mos.	0.16 (NS)	0.45 (NS)	0.22 (NS)	0.48 (NS)	0.28 (NS)	0.30 (NS)	0.33 (NS)	0.002 (S)
3. Even outside the body, the HIV virus is hard to kill	0.003 (S)	0.04 (S)	0.03 (S)	0.05 (S)	0.14 (NS)	0.01 (S)	0.40 (NS)	0.73 (NS)
Presenting symptoms								
1. A patient is known to have HIV if s/he has tested positive for HIV	0.49 (NS)	0.50 (NS)	0.42 (NS)	0.60 (NS)	0.86 (NS)	0.14 (NS)	0.65 (NS)	<0.0001 (S)
2. One cannot know by looking if someone is HIV-positive	0.30 (NS)	0.03 (S)	0.12 (NS)	0.88 (NS)	0.52 (NS)	0.54 (NS)	0.96 (NS)	0.05 (S)
Mode of transmission								
1. Blood and semen are the only bodily fluids that transmit HIV	0.35 (NS)	0.63 (NS)	0.26 (NS)	0.82 (NS)	0.21 (NS)	0.35 (NS)	0.19 (NS)	0.20 (NS)

p > 0.05- Not significant; *p* ≤ 0.05-Significant

Table 6: P Values for the Relationship between Knowledge and Preventive Practice of Respondents

Attitude	Preventive Practice 1	Preventive Practice 2	Preventive Practice 3	Preventive Practice 4
Virology				
1. HIV is the virus that causes AIDS	0.13 (NS)	0.30 (NS)	0.88 (NS)	1.00 (NS)
2. Persons infected with HIV will likely develop antibodies within 6 mos.	0.61 (NS)	0.48 (NS)	0.02 (S)	1.00 (NS)
3. Even outside the body, the HIV virus is hard to kill	0.10 (NS)	0.56 (NS)	0.48 (NS)	1.00 (NS)
Presenting symptoms				
1. A patient is known to have HIV if s/he has tested positive for HIV	0.009 (S)	0.85 (NS)	0.82 (NS)	1.00 (NS)
2. One cannot know by looking if someone is HIV-positive	0.82 (NS)	0.42 (NS)	0.73 (NS)	1.00 (NS)
Mode of transmission				
1. Blood and semen are the only bodily fluids that transmit HIV	0.73 (NS)	0.48 (NS)	0.82 (NS)	1.00 (NS)

p > 0.05- Not significant; *p* ≤ 0.05-Significant

Table 7: P Values for the Relationship between Attitude and Preventive Practice of Respondents

Attitude on People Living with HIV/AIDS	Preventive Practice 1	Preventive Practice 2	Preventive Practice 3	Preventive Practice 4
1. An HIV Positive woman has the right to become pregnant	0.54 (NS)	0.11 (NS)	0.32 (NS)	1.00 (NS)
2. An HIV-positive teacher should be allowed to teach	0.02 (S)	0.26 (NS)	0.51 (NS)	1.00 (NS)
3. Most people living with HIV were infected because of irresponsible behavior	0.23 (NS)	0.19 (NS)	0.005 (S)	1.00 (NS)
4. I would be willing to care for a family member who had AIDS in my home	0.42 (NS)	0.77 (NS)	0.96 (NS)	1.00 (NS)
5. If I were infected with HIV and told my partner, he/she would leave me	0.86 (NS)	0.04 (S)	0.66 (NS)	1.00 (NS)
6. I would feel comfortable sharing a bathroom with a person I knew had HIV/AIDS	0.05 (S)	0.0001 (S)	0.02 (S)	1.00 (NS)
7.If I found out that a food or vegetable vendor was HIV positive, I would feel comfortable buying from her	0.09 (NS)	0.18 (NS)	0.57 (NS)	1.00 (NS)
8. AIDS is God's punishment for immorality	0.60 (NS)	0.51 (NS)	0.74 (NS)	1.00 (NS)

$p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

Differences in the Knowledge, Attitudes and Preventive Practice when Grouped According to Respondents Demographic Variable

Differences in the Knowledge According to the Different Demographic Variables

Table 8 displays the *p-values*, which compare the respondents' knowledge of HIV/AIDS based on various demographic characteristics. The results indicate no significant difference exists in their knowledge, with all *p-values* exceeding 0.05. Thus, the characteristics of the respondents have no bearing on their knowledge.

Table 8: P Values for the Comparison of Knowledge According to the Different Demographic Variables

Knowledge with Regards to HIV/AIDS	Age	Gender	Civil Status	Position	Educational Attainment	Years in service
Virology						
1. HIV is the virus that causes AIDS	0.62 (NS)	0.70 (NS)	0.98 (NS)	0.43 (NS)	0.94 (NS)	0.43 (NS)
2. Persons infected with HIV will likely develop antibodies within 6 mos.	0.56 (NS)	0.54 (NS)	0.43 (NS)	0.64 (NS)	0.80 (NS)	0.60 (NS)
3. Even outside the body, the HIV virus is hard to kill	0.84 (NS)	0.29 (NS)	0.71 (NS)	0.96 (NS)	0.21 (NS)	0.16 (NS)

Presenting symptoms						
1. A patient is known to have HIV if s/he has tested positive for HIV	0.26 (NS)	0.83 (NS)	0.95 (NS)	0.78 (NS)	0.69 (NS)	0.95 (NS)
2. One cannot know by looking if someone is HIV-positive	0.88 (NS)	0.54 (NS)	0.94 (NS)	0.77 (NS)	0.37 (NS)	0.77 (NS)
Mode of transmission						
1. Blood and semen are the only bodily fluids that transmit HIV	0.68 (NS)	0.27 (NS)	0.41 (NS)	0.53 (NS)	0.28 (NS)	0.12 (NS)

$p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

Differences in the Attitude According to the Different Demographic Variables

In Table 9, the p -values are presented to compare the attitudes of respondents towards people living with HIV/AIDS based on their demographic characteristics. The results indicate that there is a significant difference in the attitude towards an HIV-positive woman having the right to become pregnant based on age and sex, with p values of 0.05 and 0.02, respectively. The older the respondent, the less they agree with this matter. Additionally, females tend to disagree more than males. Furthermore, there is a significant difference in the attitude towards the belief that most people living with HIV were infected due to irresponsible behavior based on gender and civil status, with p -values of 0.05 and 0.02, respectively. Females tend to disagree more than males. Married individuals tend to disagree more than others, and they also express concern that their partner may leave them if they were to disclose their HIV status.

Table 9: P Values for the Comparison of Attitude According to the Different Demographic Variables

Attitude on People Living with HIV/AIDS	Age	Gender	Civil Status	Position	Educational Attainment	Years in Service
1. An HIV Positive woman has the right to become pregnant	0.05 (S)	0.02 (S)	0.22 (NS)	0.61 (NS)	0.36 (NS)	0.10 (NS)
2. An HIV-positive teacher should be allowed to teach	0.41 (NS)	0.09 (NS)	0.31 (NS)	0.79 (NS)	0.85 (NS)	0.98 (NS)
3. Most people living with HIV were infected because of irresponsible behavior	0.58 (NS)	0.05 (S)	0.02 (S)	0.20 (NS)	0.26 (NS)	0.22 (NS)
4. I would be willing to care for a family member who had AIDS in my home	0.08 (NS)	0.57 (NS)	0.42 (NS)	0.76 (NS)	0.60 (NS)	0.41 (NS)
5. If I were infected with HIV and told my partner, he/she would leave me	0.23 (NS)	<0.001 (S)	0.42 (NS)	0.80 (NS)	0.47 (NS)	0.10 (NS)
6. I would feel comfortable sharing a bathroom with a person I knew had HIV/AIDS	0.09 (NS)	0.63 (NS)	0.56 (NS)	0.93 (NS)	0.43 (NS)	0.38 (NS)
7. If I found out that a food or vegetable vendor was HIV positive, I would feel comfortable buying from her	0.73 (NS)	0.56 (NS)	0.06 (NS)	0.81 (NS)	0.09 (NS)	0.12 (NS)
8. AIDS is God's punishment for immorality	0.40 (NS)	0.66 (NS)	0.77 (NS)	0.45 (NS)	0.49 (NS)	0.41 (NS)

$p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

Differences in the Preventive Practices According to the Different Demographic Variables

In this study, Table 10 presents the *p-values* that compare the attitudes of the participants towards individuals living with HIV/AIDS based on various demographic characteristics. The findings reveal a significant contrast in preventive practices concerning maintaining a healthy diet based on age ($p=0.04$) and sex ($p=0.007$). Additionally, a noteworthy distinction exists in the preventive practice of using a new, unused needle for each injection, based on civil status ($p=0.0001$). These results suggest that demographic factors play a crucial role in shaping attitudes and behaviors toward individuals living with HIV/AIDS.

Table 10: P Values for the Comparison of Preventive Practices According to the Different Demographic Variables

Prevention Measures	Age	Gender	Civil Status	Position	Educational Attainment	Years in Service
Abstain from sexual intercourse	0.93 (NS)	1.00 (NS)	0.53 (NS)	1.00 (NS)	0.44 (NS)	0.78 (NS)
Maintains a healthy diet	0.04 (S)	0.007 (S)	0.30 (NS)	0.89 (NS)	0.65 (NS)	0.07 (NS)
Uses a new, unused needle for each injection	0.57 (NS)	1.00 (NS)	0.0001 (S)	1.00 (NS)	0.90 (NS)	0.11 (NS)
Always uses a condom during sex	1.00 (NS)	1.00 (NS)	1.00 (NS)	1.00 (NS)	1.00 (NS)	1.00 (NS)

$p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

Proposed Model

In the country, there are currently 60 HIV treatment hubs that are primarily located in NCR and Region 3, as well as in CAR and Region 9 (DOH, 2018). Their main purpose is to offer healthcare and medication to individuals with HIV-AIDS, which includes testing, counseling, and medications like the Anti-Retroviral Therapy. However, local health centers should also be able to provide essential services to HIV patients or those who wish to be tested. Wherein education and information on HIV are highly recommended to be included in the capabilities of health centers.

The proposed model aims to establish and implement a system that will effectively raise awareness and knowledge of HIV prevention and education, especially among the youth. It involves coordination with education and outreach personnel who will be responsible for disseminating information. This will be a proactive model which approaches preventing HIV spread and will support the National HIV/STI Prevention Program of the Department of Health. The model highlights a community-based, locally-responsive, and prevention-focused intervention that uses a cascade approach targeting high-risk and vulnerable ages, as well as people not living with HIV and people living with HIV (PLHIV) who may belong to high-risk groups. Moreover, the model can be adopted nationally in different areas and conditions of the localities.

Studies in the Philippines show that people have limited knowledge about HIV and HIV

prevention (James *et al.*, 2022). Additionally, it has been found that educational interventions must consider local contexts and infection rates to be effective (Faust & Yaya, 2018). This includes culture, as it also plays a significant role in HIV-related behaviors and decisions, but it is often overlooked in program implementation. With the help of culturally-sensitive HIV prevention education, citizens will be able to prevent new infections and limit the spread of current cases. The model includes establishing a two-way HIV registry and health behavior surveillance system, designing culturally appropriate teaching materials and preventive intervention strategies based on research findings, and carrying out outreach activities. It will use existing health units in barangays and rural areas to connect people with health centers and treatment hubs that offer free services. Each local government unit will have a designated focal person to communicate better with the community.

Local government officials will oversee and administer the local health offices and provide money, while the Department of Health will offer technical assistance, financial support, and policy guidance. The model's bidirectional input and feedback from all of its components are intended to continuously improve the way HIV/AIDS programs are implemented.

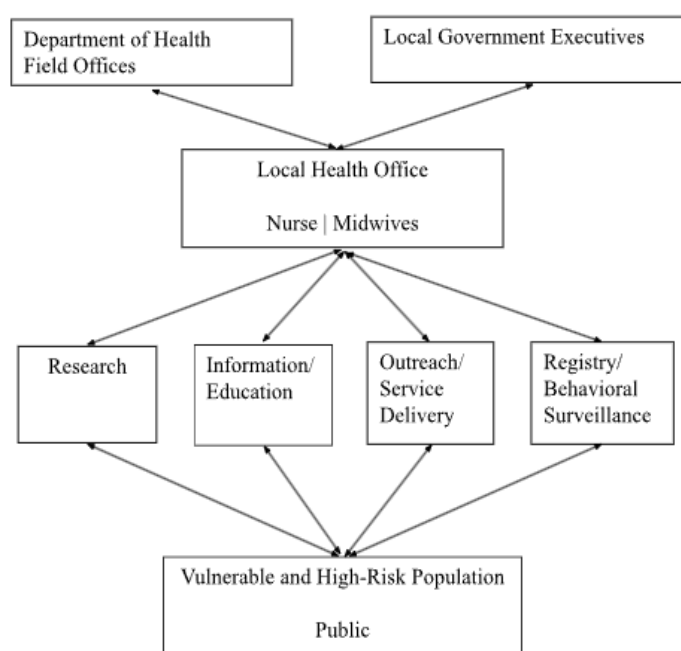


Figure 1: Proposed Model

CONCLUSION

Nurses and midwives have demonstrated impartiality towards their patients and hold positive attitudes towards individuals with HIV. However, it is important to note that there is a need to further improve their understanding of HIV/AIDS transmission. Everyone is susceptible to infection, thus, it is essential that medical professionals possess the necessary skills to

successfully manage HIV and infected patients effectively while minimizing the risk of infection and preventing the spread of the virus. In order to achieve this, it is recommended to implement programs and projects aimed at enhancing their knowledge, understanding, and appreciation of HIV, including its transmission, prevention, and treatment.

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